

**National Oceanic and Atmospheric Administration
Office of the Chief Information Officer
FY 2005 Operating Plan**

1.0 Program Information/Planned Accomplishments

1.1 FY 2005 Objectives designed to achieve goal in Strategic Plan

Goal: Provide Critical Support for NOAA's Mission

Sub-Goal: Mission Support

Objective: Increase internal and external availability, reliability, security, and use of NOAA information technology and services.

- Operationally deploy Grants On-Line System
- Reduce the number of NOAA email servers
- Begin implementation of the Enterprise Network Architecture
- Issue an enterprise Patch Management Policy
- Implement enterprise patch management application
- Provide enterprise IT security awareness training for all employees and contractors
- In conjunction with DOC, develop a standard C&A process for use across the Department
- Implement new IT Security Program performance metrics
- Extend enterprise intrusion detection
- Enhance NOAA incident response capability
- Manage IT Security Program
- Establish wireless network policy
- Develop IT inventory policies and procedures
- Execute the NEP approved Management Information System implementation approach
- Provide technical services in the development of Facilities Real Property Assessment Tool
- Upgrade Information Technology Center (ITC) infrastructure

Goal: Provide Critical Support for NOAA's Mission

Sub-Goal: Leadership

Objective: Enhance applicability of NOAA services to Homeland Security efforts

- Sustain NOAA support to Department of Homeland Security Operations Center, Interagency Incident Management Group, Interagency Modeling and Atmospheric Assessment Center, and Marine Domain Awareness
- Comply with Federal COOP requirements, policies and directives

- Deliver timely and quality products to Department of Homeland Security Operations Center
- Establish a geographically diverse enterprise email fail over capability

Goal: WEATHER AND WATER

Program: Environmental Modeling

Objective: Increase development, application, and transition of advanced science and technology to operations and services.

- Implement the HPC “One NOAA” integrated management model
- Support research to provide new capabilities to support NOAA’s mission
- Apply advanced IT technologies to improve NOAA’s environmental modeling
- Explore advance network technologies to support NOAA’s future technology needs

1.2 Performance Measures

Non-GIPRA Measure	FY05 Target	Responsible LO	POC
Increased availability of the NOAA Enterprise Network and Applications	99.2%	OCIO	Carl Staton
Increased security of the NOAA Enterprise Network	TBD	OCIO	Carl Staton
Increase level of utilization of NOAA’s Homeland Security-related assets	15%	OCIO	Carl Staton

1.3 LO/SO FY 2005 Milestones by program and by quarter

NOAA GOAL	Program	Milestone (Brief description of Each milestone)	Quarter Due	Responsible LO Component	Total Program Funding
Mission Support	IT Services	Deploy Grants On-line iterations 1-6	Q1	OCIO	\$767k
Mission Support	IT Services	Deploy Grants On-line iterations 7-10	Q2	OCIO	\$264k
Mission Support	IT Services	Complete consolidation plan	Q2	OCIO	\$10k

		identifying servers and locations			
Mission Support	IT Services	Reduce the number of (non ship) email servers from 59 to no more than 22	Q4	OCIO	\$200k
Mission Support	IT Services	Establish a geographically remote email back up/failover capability	Q4	OCIO	\$100k
Mission Support	IT Services	Develop Enterprise Network Target Architecture Implementation Plan	Q1	OCIO	\$10k
Mission Support	IT Services	Integrate Administrative Network into Enterprise Network Target	Q3	OCIO	\$80k
Mission Support	IT Services	Complete Consolidation Plan identifying servers and locations	Q2	OCIO	\$8k
Mission Support	IT Services	Approval of Patch Management Policy	Q1	OCIO	\$250k
Mission Support	IT Services	Start development of automated patch application <ul style="list-style-type: none"> • Develop specs –Q2 • Select vendor - Q3 • Deploy PM Tool -Q4 • Implement - Q4 	Q2, Q3, Q4	OCIO	\$6k
Mission Support	IT Services	Implement the FY05 NOAA-wide web-based security awareness tutorial	Q2	CIO	\$40K
Mission Support	IT Services	Ensure all NOAA employees/contractors complete annual awareness training	Q2	OCIO	\$6k
Mission Support	IT Services	Complete development of a standard process for	Q1	OCIO	\$5k

		providing acceptable C&A documentation			
Mission Support	IT Services	Implement new IT Security program performance metrics	Q1	OCIO	\$9k
Mission Support	IT Services	Start implementation to deploy Intrusion Detection Software at major sites.	Q4	OCIO	\$316
Mission Support	IT Services	Establish the Satellite CIRT in Seattle	Q4	OCIO	\$160K
Mission Support	IT Services	Complete the review of CIRT internal procedures	Q2	OCIO	\$6k
Mission Support	IT Services	Provide specialized UNIX and/or Microsoft training for system/network administrators	Q4	OCIO	\$23k
Mission Support	IT Services	Implement and Test N-CIRT COOP hot site	Q4	OCIO	\$15k
Mission Support	IT Services	Provide FISMA Plans of Actions & Milestones for FY2003 and FY2004	Q1, Q2, Q3, Q4	OCIO	\$5k
Mission Support	IT Services	Complete testing of new security planning software, NOAA Total Security Management Software (TSMC)	Q1	OCIO	\$4k
Mission Support	IT Services	Review/Update IT Systems Inventory	Q2, Q4	OCIO	\$2k
Mission Support	IT Services	Hold IT Security Conference	Q3	OCIO	\$7K
Mission Support	IT Services	Ensure all IT system security plans are reviewed and updated	Q4	OCIO	\$25k
Mission Support	IT Services	Mitigate all high & medium risks vulnerabilities, via implementation of scanning tool	Q4	OCIO	\$25k
Mission Support	IT Services	Complete deployment of 7,500 personal firewalls throughout	Q3	OCIO	\$3k

		enterprise			
Mission Support	IT Services	Develop a plan and schedule to complete penetration testing on all national critical systems	Q2	OCIO	\$1k
Mission Support	IT Services	Complete MIS baseline management information architecture v.1	Q2	OCIO	\$17k
Mission Support	IT Services	Complete target management information architecture, v.1	Q3	OCIO	\$14k
Mission Support	IT Services	Complete MIS implementation plan	Q4	OCIO	\$20k
Mission Support	IT Services	Deploy development, test, and production servers for Oracle, BEA, and Tibco	Q2	OCIO	\$16k
Mission Support	IT Services	Deploy CAMS data warehouse server and storage hardware			\$24k
Mission Support	IT Services	Implement two HP Alpha ES47's and EVA5000 storage array for CAMS disaster recovery	Q4	OCIO	\$50k
Mission Support	IT Services	Complete technical review and evaluation of design documents for Real Property Assessment tool	Q1	OCIO	\$4k
Mission Support	IT Services	Complete technical support to obtain system data files for Real Property Assessment tool	Q1	OCIO	\$6k
Mission Support	IT Services	Perform technical evaluation of software processes for Real Property Assessment tool	Q2	OCIO	\$2k
Leadership	Homeland Security	Provide DHS/HSOC with a detailed NOAA capabilities briefing	Q2	OCIO	\$1k

Leadership	Homeland Security	Revise NOAA Headquarters COOP Plan to meet current Federal Preparedness Circular 65 (FPC-65) requirements and GAO audit recommendations	Q2	OCIO	\$16k
Leadership	Homeland Security	Plan and conduct COOP exercise involving a partial deployment to Alternate Site A	Q2	OCIO	\$1k
Leadership	Homeland Security	Implement HSOC policy and procedures for Line Offices	Q1	OCIO	\$2k
Leadership	Homeland Security	Participate in four COOP drills to test interoperability of communications among federal-wide alternate sites (Title Globe)	Q1, Q2, Q3, Q4	OCIO	\$2k
Leadership	Homeland Security	Participate in one government-wide COG exercise	Q3	OCIO	\$5k
Leadership	Homeland Security	Plan and conduct one functional exercise to test NOAA's Incident Coordination Center's capability to respond to a simulated emergency	Q4	OCIO	\$2k
Weather & Water	Environmental Modeling	Obtain DPA HPC procurements	Q1	OCIO	\$0
Weather & Water	Environmental Modeling	Issue RFP	Q2	OCIO	\$0
Weather & Water	Environmental Modeling	Complete competitive range determination	Q3	OCIO	\$0
Weather & Water	Environmental Modeling	Award Contract(s)	Q4	OCIO	\$600k
Weather & Water	Environmental Modeling	Evaluate new IT proposals for advancing NOAA's capabilities	Q1	OCIO	\$2000k

Weather & Water	Environmental Modeling	Mid-term review of proposal progress	Q3	OCIO	\$0k
Weather & Water	Environmental Modeling	Transition top three proposals to operations	Q4	OCIO	\$400k
Weather & Water	Environmental Modeling	Complete acceptance testing of the High Performance Computing System at GFDL	Q3	OCIO	\$7000k
Weather & Water	Environmental Modeling	Complete porting and interoperability testing of GFS, WFF-MM, and MOM-4 to Linux cluster	Q3	OCIO	\$1000k
Weather & Water	Environmental Modeling	Develop GRIB-2 capability for WRF SI and adapt WRF SI to AWIPS laps	Q3	OCIO	\$750k
Weather & Water	Environmental Modeling	Add advanced Full-Implicit and Semi-Implicit time algorithms as well as Semi-Lagrangian advection algorithms to the NCEP Global Forecast System (NCEP)	Q4	OCIO	\$200k
Weather and Water	Environmental Modeling	Incorporate and test software for ensemble forecasting into the Earth System Modeling Framework with attention to system performance (NCEP)	Q2	OCIO	\$200k
Weather and Water	Environmental Modeling	Develop advanced techniques for anisotropic covariances on parallel computing architectures and incorporate into mesoscale surface analysis for North	Q3	OCIO	\$200k

		America run (NCEP)			
Weather and Water	Environmental Modeling	Complete technical development and apply advanced neural network techniques to the problem of non-linear wave interactions for Wave Watch (NCEP)	Q4	OCIO	\$200k
Weather and Water	Environmental Modeling	Complete development of an ocean-atmosphere flux coupler and begin to compare accuracy and computational performance with ESMF-compatible couplers (NCEP)	Q4	OCIO	\$200k
Weather and Water	Environmental Modeling	Complete development of the Ensemble Kalman Filter technique for generating ensemble perturbations (NCEP)	Q3	OCIO	\$200k
Weather and Water	Environmental Modeling	Evaluate dark fiber option for connecting GFDL to DC metropolitan network at high speed	Q1	OCIO	\$100k
Weather and Water	Environmental Modeling	Provide HPC support to NOAA R&D community	All	OCIO	\$3500k
Weather and Water	Environmental Modeling	Upgrade SW and HW infrastructure required for GFDL Coupled Climate Model	Q4	OCIO	\$2700k
Weather and Water	Environmental Modeling	Connect a NOAA facility to the National Lambda Rail network to begin high speed data transfer testing (OAR)	Q4	OCIO	\$500k
Cross-Cutting	Developing, Valuing, and	Support development of E-Learning course	Q4	OCIO	\$10k

Priority	Sustaining a World-Class Workforce	on using Quickhire			
Cross-Cutting Priority	Integrating Global Environmental Observations and Data Management	Include GEOSS and DM in FY05 Strategic IT Plan	Q2	OCIO	\$0K
Cross-Cutting Priority	Integrating Global Environmental Observations and Data Management	Include GEOSS and DM in the Target Enterprise Architecture	Q3	OCIO	\$0K
Cross-Cutting Priority	Ensuring Sound, State-of-the-Art Research	Issue RFP for HPC procurements	Q2	OCIO	\$0k
Cross-Cutting Priority	Exercising International Leadership	Award HPC contract(s)	Q4	OCIO	\$0k
	Total	Funding for Program			\$22419k

Responsible LO Component	Q1	Q2	Q3	Q4	Total Number of Milestones
OCIO	15	18	15	22	70

1.4 Due Dates/Reports (Congressional Reports) – Does Not Apply To OCIO

1.5 OMB PART Findings (actions to mitigate) – Does Not Apply To OCIO

2.0 Budget/Resource Information (listed by sub activity level):

2.1 Proposed Transfers/Reprogramming: None

2.2 New Starts/Terminations of programs: None

2.3 Extramural Research Budgets: None

2.4 Financial Audit Actions:

NFR NOAA 2004-03 – Independent risk assessments not performed for NOAA-CAMS or the NOAA ITC facility (prior year issue)

OPEN: Independent Risk Assessment of CAMS IC (prior year) completed 9/04. IT Security Office will perform ITC assessment.

NFR NOAA 2004-01 – Default Oracle database passwords (prior year issue)

OPEN: Oracle internal User-IDs/Passwords cannot be changed for operation. Will request waiver from DOC.

NFR NOAA 2004-04 – Dial-up remote access numbers are not adequately restricted

OPEN - Requires memo to card holders, removal of dial-up capability, or changing numbers

NFR NOAA 2004-19 – Ineffective user account management (prior year issue)

[CAMSPD]

OPEN: Requires improved process/communication with HR

NFR NOAA 2004-07 – Software change control procedures were not fully implemented (prior year issue)

OPEN: Development/implementation of strong Change Control process underway.

NFR NOAA 2004-13 – Inadequate restrictions for the use of system software (prior year issue) [ITC & CAMSPD]

OPEN: Process under review including access and alternatives.

NFR NOAA 2004-14 – Inadequate monitoring of system software usage (prior year issue)

OPEN: In progress. Monitoring software is being deployed to all CAMS systems to monitor, track access, and maintain history

NFR NOAA 2004-16 – Job descriptions not adequately documented (prior year issue)

OPEN: In progress

NFR NOAA 2004-08 – Lack of controls to mitigate service interruptions (prior year issue)

OPEN: In progress. Generator installation underway; planned completion 11/04. COOP systems acquired for Prod CAMS and CAMS DW

NFR NOAA 2004-09 – Documented results of DRP and COOP tests not available (prior year issue)

OPEN: In progress. FY04 partial D-R test has been documented. Next test planned Q1

FY05.

NFR NOAA 2004-10 – Inadequate business resumption controls (prior year issue)

OPEN: In progress. System/application priorities are defined. Incorporation into DRP and COOP in progress.